



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/606,855 | 06/26/2003 | Yunoh Jung | 20862.A.NP | 5848 |
| 20551 | 7590 | 05/04/2004 | EXAMINER | |
| THORPE NORTH & WESTERN, LLP. 8180 SOUTH 700 EAST, SUITE 200 P.O. BOX 1219 SANDY, UT 84070 | | | MANAHAN, TODD E | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3732 | |

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|--|---|---|--|
| <p align="center">Office Action Summary</p> | <p>Application No.</p> <p>10/606,855</p> | <p>Applicant(s)</p> <p>JUNG ET AL.</p> | |
| | <p>Examiner</p> <p>Todd E. Manahan</p> | <p>Art Unit</p> <p>3732</p> | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/29/03, 01/23/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3732

DETAILED ACTION

Response to Amendment

The amendment to the specification filed 12 March 2004 has not been entered because it does not comply with 27 CRR 1.121 (b)(1) which requires applicant to provide a clean copy of the amended paragraphs.

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 8 and 27-29 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 10 and 29-31, respectively of copending Application No. 10/606,866. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3732

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2, 4-7, 11-18, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Garland (United States Patent No. 5,846,076 cited by applicant).

Garland discloses a dental articulating device configured to duplicate at least a portion of a patient's mouth for use in producing a dental prosthesis, the device comprising: a) a pair of trays 16, pivotally coupled together, the trays pivoting with respect to one another between: i) a closed configuration, in which the trays are opposingly spaced-apart from one another; and ii) an open configuration, in which the trays are pivoted away from one another; and b) a hinge, integral with the trays and positioned between the trays, including: i) a pivot axle 46, associated with one of the trays; ii) a shoulder 44, extending at least partially around the pivot axle and creating two axle portions extending on each side of the shoulder; and iii) a pair of fingers 40, associated with another of the trays, pivotally positioned on opposite sides of the pivot axle and on opposite sides of the shoulder and separated by both the axle and the shoulder. The device further comprising: a pair of arms 37,39, each extending between a different one of the trays and the hinge, and pivotally coupled together by the hinge.

Claims 27-29 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Whelan (United States Patent No. 4,439,151).

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Richardson (United States Patent No. 5,406,949 cited by applicant).

Richardson discloses a dental articulating device configured to duplicate at least a portion of a patient's mouth for use in producing a dental prosthesis, comprising: a) a pair of trays, 14, 16

Art Unit: 3732

pivotally coupled together, the trays pivoting with respect to one another between: i) a closed configuration, in which the trays are opposingly spaced-apart from one another; and ii) an open configuration, in which the trays are pivoted away from one another; and b) a hinge, integrally formed with the trays and positioned between the trays, including. i) a pivot axle 52, associated with one of the trays; ii) a shoulder 54, extending at least partially around the pivot axle and creating two axle portions extending on each side of the shoulder; and iii) a pair of fingers 36, associated with another of the trays, pivotally positioned on opposite sides of the pivot axle and on opposite sides of the shoulder and separated by both the axle and the shoulder.

Claims 11-13, 16-20, 23-25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Walter (United States Patent No. 5,466,152 cited by applicant).

It is noted that in order to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9, 10, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walter in view of Garland.

Art Unit: 3732

Walter discloses the invention essentially as claimed except for the hinge including i) a pivot axle, associated with one of the trays; ii) a shoulder, extending at least partially around the pivot axle and creating two axle portions extending on each side of the shoulder; and iii) a pair of fingers, associated with another of the trays, pivotally positioned on opposite sides of the pivot axle and on opposite sides of the shoulder and separated by both the axle and the shoulder.

Garland discloses an articulator having a hinge including i) a pivot axle, associated with one of the trays; ii) a shoulder, extending at least partially around the pivot axle and creating two axle portions extending on each side of the shoulder; and iii) a pair of fingers, associated with another of the trays, pivotally positioned on opposite sides of the pivot axle and on opposite sides of the shoulder and separated by both the axle and the shoulder. It would have been obvious to one skilled in the art to replace the hinge of the device of Walter with a hinge comprising i) a pivot axle, associated with one of the trays; ii) a shoulder, extending at least partially around the pivot axle and creating two axle portions extending on each side of the shoulder; and iii) a pair of fingers, associated with another of the trays, pivotally positioned on opposite sides of the pivot axle and on opposite sides of the shoulder and separated by both the axle and the shoulder in view of Garland in order to make a more secure pivotal connection between the trays will still permitting separation thereof if desired.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walter in view of Garland as applied to claim 1 above, and further in view of Presswood (United States Patent No. 5,403,185 cited by applicant).

Presswood discloses that it is known in the art to provide an articulator tray with a thin membrane extending across the apertures therein and piercable by a registration pin in order to

Art Unit: 3732

prevent dental plaster from leaking thru the registration holes in the tray (see col. 4, lines 1-22).

It would have been obvious to one skilled in the art to provide the device of the combination

Walter as modified by Garland with a thin membrane extending across the registration pin holes in view of Presswood in order to prevent leakage of dental plaster thru the registration holes.

Claims 14,15, 21,and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walter in view of Presswood.

It would have been obvious to one skilled in the art to provide the method of Walter with the step of pressing registration pins thru a thin membrane place over the registration holes in view of Presswood in order to prevent leakage of dental plaster thru the registration holes.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd E. Manahan whose telephone number is 703 308-2695. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 703 308-2582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

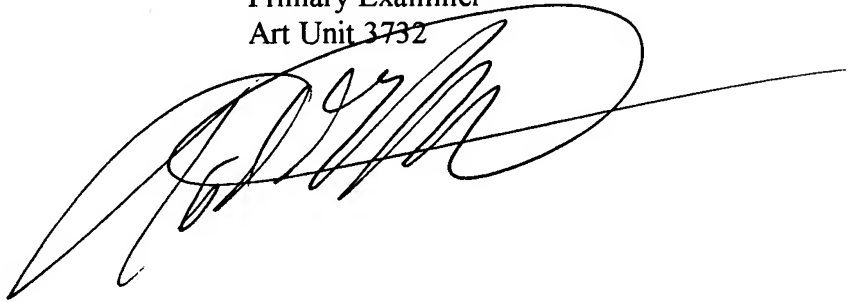
Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Todd E. Manahan
Primary Examiner
Art Unit 3732

T.E. Manahan

29 April 2004

A large, stylized handwritten signature in black ink, likely belonging to Todd E. Manahan, is written over the printed name and title.